

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/602,207	06/24/2003	James M. Allen		2232
31083	7590 12/12/2003		EXAMINER	
THOMTE, MAZOUR & NIEBERGALL, L.L.C.			TADESSE, YEWEBDAR T	
2120 S. 72ND OMAHA, NE	STREET, SUITE 1111 68124		ART UNIT	PAPER NUMBER
Other in the			1734	
			DATE MAILED: 12/12/2000	3

Please find below and/or attached an Office communication concerning this application or proceeding.

			L A - Ho - Ma)				
****	Applicati n No	•	Applicant(s)				
	10/602,207		ALLEN, JAMES M.				
Office Action Summary	Examiner		Art Unit				
	Yewebdar T Tac		1734				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply							
A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a r - If NO period for reply is specified above, the maximum statutory perions - Failure to reply within the set or extended period for reply will, by state - Any reply received by the Office later than three months after the may earned patent term adjustment. See 37 CFR 1.704(b). Status	1.136(a). In no event, how eply within the statutory m od will apply and will expire	vever, may a reply be tir inimum of thirty (30) day s SIX (6) MONTHS from to become ABANDONE	nely filed /s will be considered timely. n the mailing date of this communication. ED (35 U.S.C. § 133).				
1) Responsive to communication(s) filed on	<u></u>						
2a)☐ This action is FINAL . 2b)☑ Th	nis action is non-fin	al.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Disposition of Claims							
4)⊠ Claim(s) <u>1-17</u> is/are pending in the applicating 4a) Of the above claim(s) is/are without 5)□ Claim(s) is/are allowed. 6)⊠ Claim(s) <u>1-7</u> is/are rejected. 7)⊠ Claim(s) <u>8-17</u> is/are objected to. 8)□ Claim(s) are subject to restriction and	Irawn from conside	••					
Application Papers							
9) The specification is objected to by the Examiner.							
10) The drawing(s) filed on 24 June 2003 is/are:							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).							
11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.							
Priority under 35 U.S.C. §§ 119 and 120 12) Acknowledgment is made of a claim for fore							
a) All b) Some * c) None of: 1. Certified copies of the priority docum 2. Certified copies of the priority docum 3. Copies of the certified copies of the papplication from the International But * See the attached detailed Office action for a 13) Acknowledgment is made of a claim for dom since a specific reference was included in the 37 CFR 1.78. a) The translation of the foreign language 14) Acknowledgment is made of a claim for dom reference was included in the first sentence of	ents have been recents have been recording documents reau (PCT Rule 17 list of the certified estic priority under provisional applicates priority under	ceived. ceived in Applica have been receiv (2(a)). copies not receiv 35 U.S.C. § 119 he specification of	ved in this National Stage ved. ve) (to a provisional application) or in an Application Data Sheet. eceived.				
Attachment(s)	•	_					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449) Paper Not	4) [5) [s) <u>08292003</u> 6) [Notice of Informal	ry (PTO-413) Paper No(s) Patent Application (PTO-152)				

Art Unit: 1734

DETAILED ACTION

Page 2

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "blender "must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

- 2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:
 - 1. Determining the scope and contents of the prior art.
 - 2. Ascertaining the differences between the prior art and the claims at issue.
 - 3. Resolving the level of ordinary skill in the pertinent art.
 - 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
- 4. Claims 1 and 6-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oberg et al (US 4,323,313) in view of GB 2,165,469 and Derrah et al (US

Application/Control Number: 10/602,207

Art Unit: 1734

5,399,186). As to claims 1 and 7, Oberg et al discloses (see Figs 1-2, column 2, lines 57-60) an impregnator system for coating fertilizer with liquid chemicals comprising at least one container adapted to hold the at least one fluid (sources of liquid chemicals in communication with the pumps), a blender having inner chamber adapted to selectively receive the particulate and the at least one fluid (mixing drum 16), a supply line adapted to carry the at least one fluid, having first and second end portions; the first end portion being operatively coupled with the at least one container (first end portions of lines 42, 44, 46 and 48 in communication with the sources of liquid chemicals through pumps) and a pump for selectively forcing the fluid through the supply lines (pumps 50, 52, 54 and 56). Oberg et al discloses a part attached to the end portion (discharge line 18) in fluid communication with the blender (mixing tank 16). Yet, in Oberg e al device it is unclear whether this end part is a nozzle. However, a nozzle attached to the dispensing line in communication with a mixing tank is well known in the art; for instance Derrah et al discloses nozzle (48, 58) attached to the coating material supply conduit (84) wherein the nozzle is in flow communication with the mixing bed. It would have been obvious at the time the invention was made to include spraying nozzle in Oberg et al device to evenly distribute or spread the chemical within the mixing tank. Oberg et al lacks teaching a return line having first and second end portions, the first end portion being operatively coupled with the second end portion of the supply line, the second end portion of the return line being operatively coupled with the at least one container and the supply line and the return line forming a continuous loop. GB'469 discloses (see Fig. 2) liquid spray system having a loop including liquid supply line (12) and a return line

Application/Control Number: 10/602,207

Art Unit: 1734

(13), wherein the first end portion of the return line is connected to the second end portion of the supply line through the spay arm, the second end portion of the return line is connected to the container (tank 11), the supply line and the return line forming a continuous (closed) loop and each supply and return line as shown in Fig 2 is branched into a plurality of separate supply and return lines. It would have been obvious at the time the invention was made to include a return line forming a continuous loop with the supply line in Oberg et al's device as modified to circulate in a closed loop unused spray liquid supplied to the dispenser or nozzle as taught by GB'469 (see page 3, lines 108-112).

As to claim 6, Oberg et al discloses a plurality of separate containers (sources of liquid chemicals).

5. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oberg et al (US 4,323,313) in view of GB 2,165,469, Derrah et al (US 5,399,186) as applied to claim 1 above, and further in view of Langeman (US 5,388,761). Oberg et al lacks teaching heating means for heating containers (sources of liquid). Langeman discloses (see Fig 1) electric heater (36A and 36B) provided for the tanks (22A and 22B) storing liquid components. It would have been obvious at the time the invention was made to include heating means for the sources of liquid to retain the liquid at the desired temperature.

Art Unit: 1734

6. Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Oberg et al (US 4,323,313) in view of GB 2,165,469, Derrah et al (US 5,399,186) as applied to claim 2 above, and further in view of Schafer (US 5,843,621). Oberg et al as modified is silent concerning insulation for the supply and return lines. Schafer teaches (see column 5, lines 32-37 and column 7, lines18-23) insulated supply and return pipes. It would have been obvious at the time the invention was made to include insulated supply and return lines in Oberg et al to prevent heat loss of the coating liquid.

7. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Oberg et al (US 4,323,313) in view of GB 2,165,469 and Derrah et al (US 5,399,186) as applied to claim 1 above, and further in view of Melliger (US 4,617,872). Oberg et al is silent concerning a scale for determining the weight of the container and the fluid within the container. Melliger discloses a scale for reservoir (19 and 21) containing coating liquid. It would have been obvious at the time the invention was made to include a scale for the container or sources of the liquid chemical to disperse exact amount of coating liquid to the particulate as taught by Melliger (see column 2, lines 56-61).

Allowable Subject Matter

8. Claims 8-17 are objected as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Application/Control Number: 10/602,207

Art Unit: 1734

9. The following is a statement of reasons for the indication of allowable subject

matter: prior art of record does not disclose or suggest a system for coating particulate

Page 6

with at least one fluid, comprising, among others, a plurality of separate supply lines and

a plurality of separate return lines wherein each of the plurality of separate supply lines

is operatively coupled with one of the plurality of separate return lines so that a plurality

of separate continuous loops are formed.

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Yewebdar T Tadesse whose telephone number is (703)

305-3539, effective December 19, 2003 the examiner telephone number is (571) 272-

1238. The examiner can normally be reached on Monday-Friday 8:00 AM-4: 30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richard Crispino can be reached on (703) 308-3853, effective December

19, 2003 the supervisor telephone number is (571) 272-1226. The fax phone number

for the organization where this application or proceeding is assigned is (703) 305-7718.

Any inquiry of a general nature or relating to the status of this application or proceeding

should be directed to the receptionist whose telephone number is (703) 308-0661.

Pembola P. F.

RICHARD CRISPINO SUPERVISORY PATENT EXAMINER

TECHNOLOGY CENTER 1700